

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

(PCT Article 36 and Rule 70)

541197  
PCT/EP2003/014726



Applicant's or agent's file reference 2772_M PCT	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/014726	International filing date (day/month/year) 22 December 2003 (22.12.2003)	Priority date (day/month/year) 02 January 2003 (02.01.2003)
International Patent Classification (IPC) or national classification and IPC F16D 55/228, 65/40, 65/42, 65/46, B60T 11/06		
Applicant KNORR-BREMSE SYSTEME FÜR NUTZFAHRZEUGE GMBH		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of _____ sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input checked="" type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>

Date of submission of the demand 28 June 2004 (28.06.2004)	Date of completion of this report 01 September 2005 (01.09.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/014726

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
pages \_\_\_\_\_ 1-11 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages \_\_\_\_\_ 1-20 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
pages \_\_\_\_\_ 1/8-8/8 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/014726

## II. Priority

1. ☒ This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:  

☒ copy of the earlier application whose priority has been claimed.  
☐ translation of the earlier application whose priority has been claimed.
2. ☐ This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid.

Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/EP 03/14726

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	20	YES
	Claims	1-19	NO
Inventive step (IS)	Claims		YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims		NO

### 2. Citations and explanations

This report makes reference to the following documents:

D1: WO 02/14125 A

D2: WO 91/19115 A

D3: DE 102 52 301 A

1. The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim is not novel within the meaning of PCT Article 33(2).

D1 discloses (the references in parentheses are to this document):

Disk brake that is actuated pneumatically or by an electric motor with

a) a brake caliper (1), which encloses a brake disk (3);

b) a tightening device (13) arranged in the brake caliper on one side of the brake disk (3), in particular a tightening device with a turning

lever (19);

- c) at least one adjusting device driven by an electrical motor (see figure 3a) on each side of the brake disk (3);
- d) wherein the at least one adjusting device (figure 3a) on the reaction side of the brake disk (3) is driven by means of a transmission and/or synchronization mechanism (72) extending from one side of the brake disk (3) to the other,

**wherein**

- e) the adjusting devices (figure 3a) are driven on both sides of the brake disk (3) by a single electric motor (106) or two electric motors (106) jointly, in the latter case the two electric motors (106) being arranged on a common side of the caliper in relation to the brake disk (3),
  - f) the transmission and/or synchronization mechanism (72) is arranged between the at least one adjusting device on the side of the brake disk (3) lying opposite the tightening device and the at least one electric motor (106).
2. Dependent claims 2-20 do not contain any features which, in combination with the features of any claim to which they refer back, meet the PCT requirements for novelty and inventive step (see D1 and D2 and the corresponding passages indicated in the search report).

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/014726

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  - ☐ translation of the earlier application whose priority has been claimed.
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Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/EP 03/14726

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	20	YES
	Claims	1-19	NO
Inventive step (IS)	Claims		YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims		NO

### 2. Citations and explanations

This report makes reference to the following documents:

D1: WO 02/14125 A

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D1 discloses (the references in parentheses are to this document):

Disk brake that is actuated pneumatically or by an electric motor with

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b) a tightening device (13) arranged in the brake caliper on one side of the brake disk (3), in particular a tightening device with a turning

lever (19);

- c) at least one adjusting device driven by an electrical motor (see figure 3a) on each side of the brake disk (3);
- d) wherein the at least one adjusting device (figure 3a) on the reaction side of the brake disk (3) is driven by means of a transmission and/or synchronization mechanism (72) extending from one side of the brake disk (3) to the other,

**wherein**

- e) the adjusting devices (figure 3a) are driven on both sides of the brake disk (3) by a single electric motor (106) or two electric motors (106) jointly, in the latter case the two electric motors (106) being arranged on a common side of the caliper in relation to the brake disk (3),
- f) the transmission and/or synchronization mechanism (72) is arranged between the at least one adjusting device on the side of the brake disk (3) lying opposite the tightening device and the at least one electric motor (106).

- 2. Dependent claims 2-20 do not contain any features which, in combination with the features of any claim to which they refer back, meet the PCT requirements for novelty and inventive step (see D1 and D2 and the corresponding passages indicated in the search report).